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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,062	08/01/2006	Harunari Shimamura	043888-0492	4341
53080 7590 07/29/2008 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, NW WASHINGTON, DC 20005-3096				
EXAMINER				
PARSONS, THOMAS H				
ART UNIT		PAPER NUMBER		
1795				
MAIL DATE		DELIVERY MODE		
07/29/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/588,062

Applicant(s)

SHIMAMURA ET AL.

Examiner

THOMAS H. PARSONS

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 01 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 08/01/2006; 04/16/2008
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Louzos (US 3,844,838) in view of JP10-083811.

Claim 1: Louzos in Figures 7-10 discloses an alkaline battery comprising: a negative electrode (40; 60) including an electrode mixture that contains a zinc or zinc alloy powder as an active material; an alkaline electrolyte (KOH); and a positive electrode (32; 58) (col. 13: 12-col. 14: 21),

wherein the zinc or zinc alloy powder has a specific surface area of 0.01 to 10 m²/g (col. 10: 33-50).

Louzos does not disclose that the weight ratio of the electrolyte to the active material (electrolyte/negative electrode active material) is in the range of 0.1 to 2.

JP10-083811 discloses a weight ratio of an electrolyte to the active material (electrolyte/negative electrode active material) that is in the range of 0.1 to 2. In particular, JP10-083811 a weight ratio of zinc to an electrolyte liquid that is set to be 1.75-190, which equates to an electrolyte to zinc ration of 1/1.75-1/1.90 or 0.57-0.52, which falls within the claimed weight ratio.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the alkaline batter of Louzos by incorporating the weight ratio of JP10-083811 because JP10-083811 teaches an alkaline battery having a weight ratio of electrolyte to zinc active material that would have provided an alkaline dry cell having excellent properties and whose electric current value scarcely fluctuates after shock thereby improving the overall life and performance of the battery.

Claim 3: The rejection of claim 3 is as set forth above in claim 1 wherein further Louzos discloses that the zinc or zinc alloy powder has a specific surface area of 0.1 to $5 \text{ m}^2/\text{g}$ (col. 10: 33-50), and JP10-083811 discloses that the weight ratio of the electrolyte to the active material is in the range of 0.2 to 0.7 .

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Louzos in view of JP10-083811 as applied to claim 1 above, and further in view of JP5-013073.

Louzos and JP10-083811 are as applied, argued, and disclosed above, and incorporated herein.

Claim 2: The Louzos combination does not disclose that the electrode mixture contains 0.15 to $0.9 \text{ wt } \%$ of lithium hydroxide.

JP5-013073 discloses that the electrode mixture contains 0.15 to $0.9 \text{ wt } \%$ of lithium hydroxide.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the electrode mixture of the Louzos combination by incorporating the lithium hydroxide of JP5-013073 because JP5-013073 teaches an alkaline

battery comprising lithium hydroxide that would have restrained corrosion of zinc and hydrogen gas generation therefrom by adding the predetermined weight percentage of lithium hydroxide thereby improving the overall life, performance and safety of the battery.

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS H. PARSONS whose telephone number is (571)272-1290. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PATRICK RYAN/
Supervisory Patent Examiner, Art Unit 1795

Thomas H Parsons
Examiner
Art Unit 1795